

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: STREETWORKS

Report Number: P399750

Luminaire Tested: **ARCH-L-PA3-180-830-U-T2R-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399750  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-13)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-PA3-180-830-U-T2R-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 80 CRI, 3000K, 775mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 16959 lumens  
Efficiency: N/A  
Efficacy: 93.7 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B1 - U0 - G2

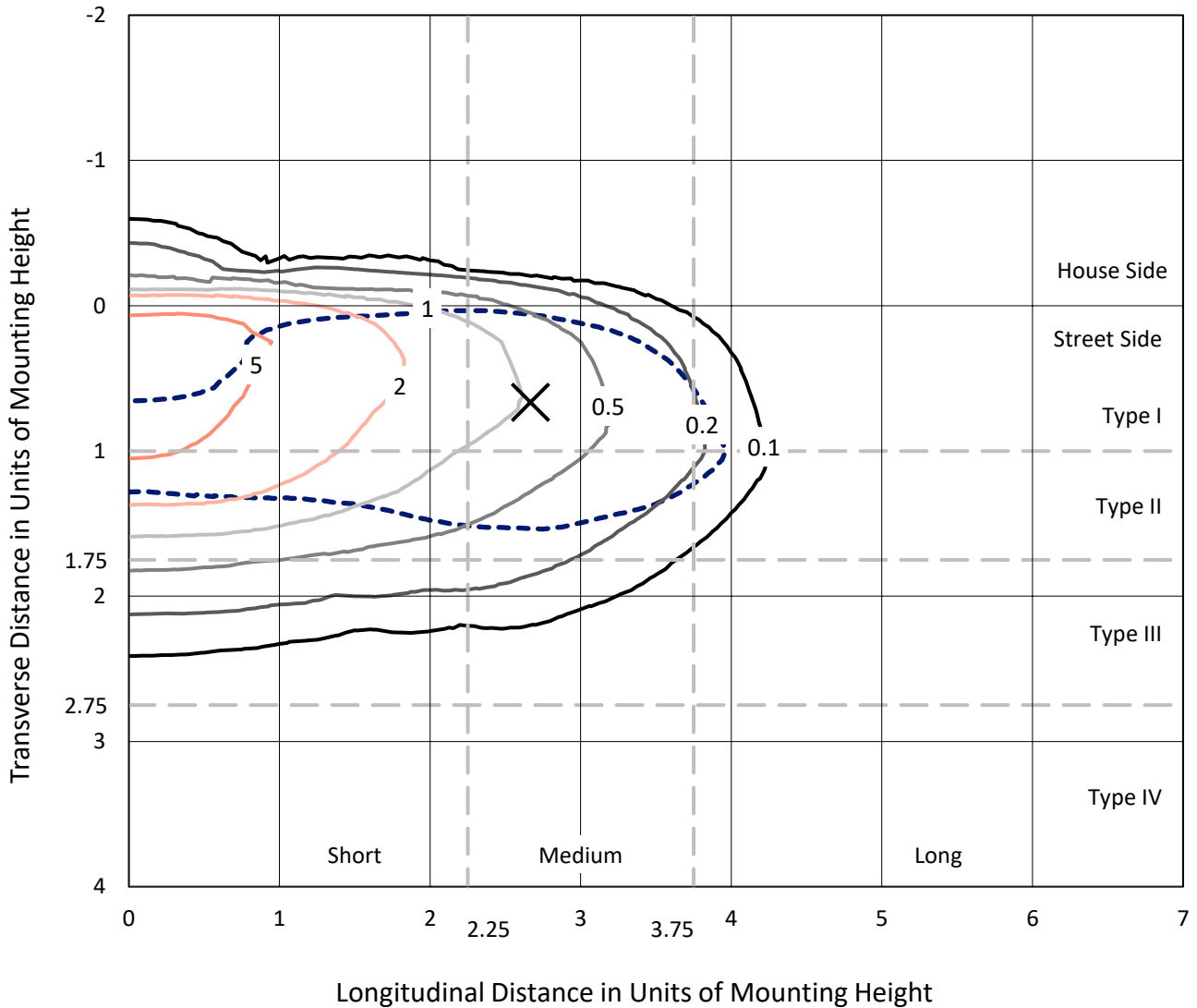
Input Watts (W): 181  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

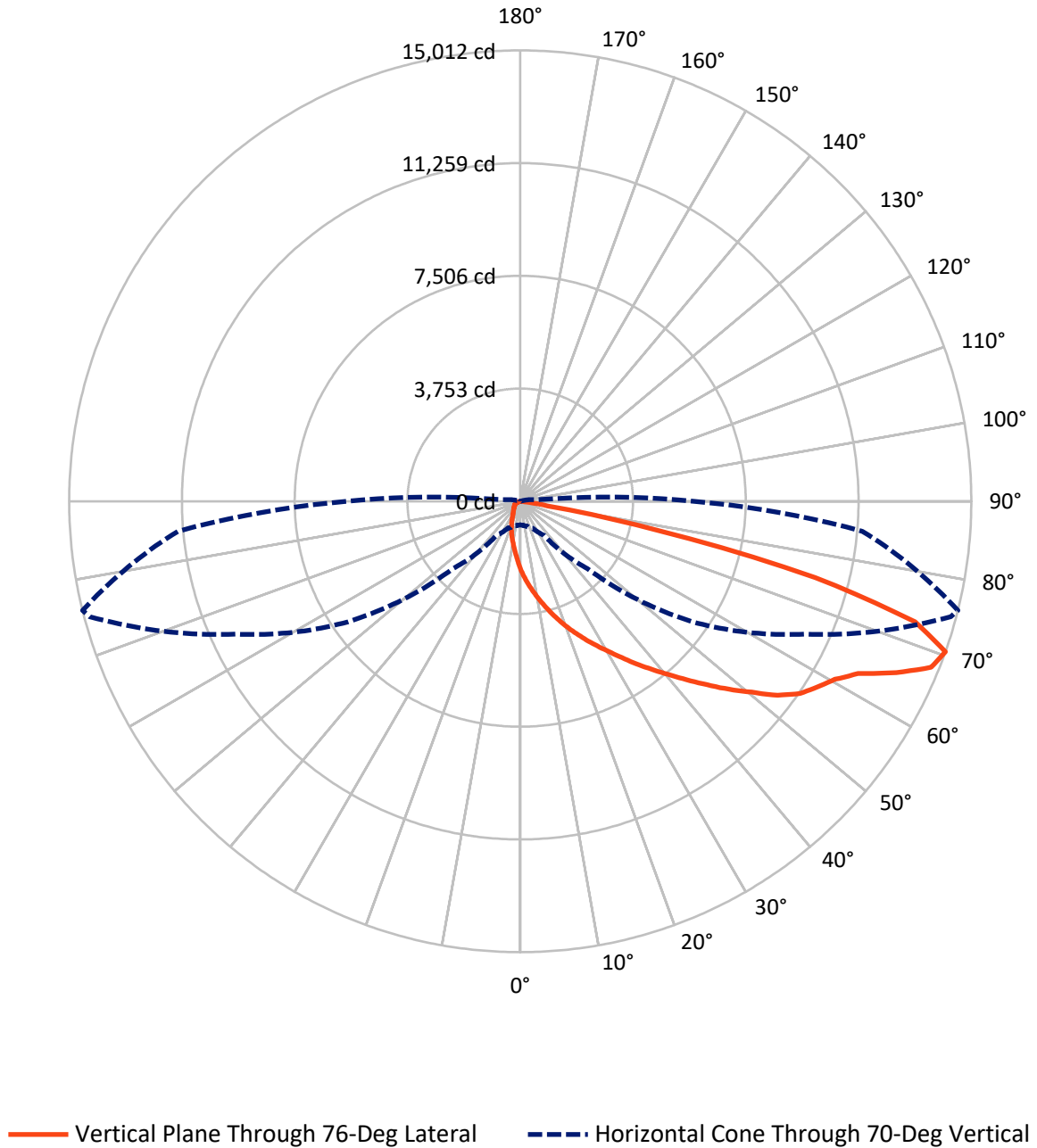
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.9 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



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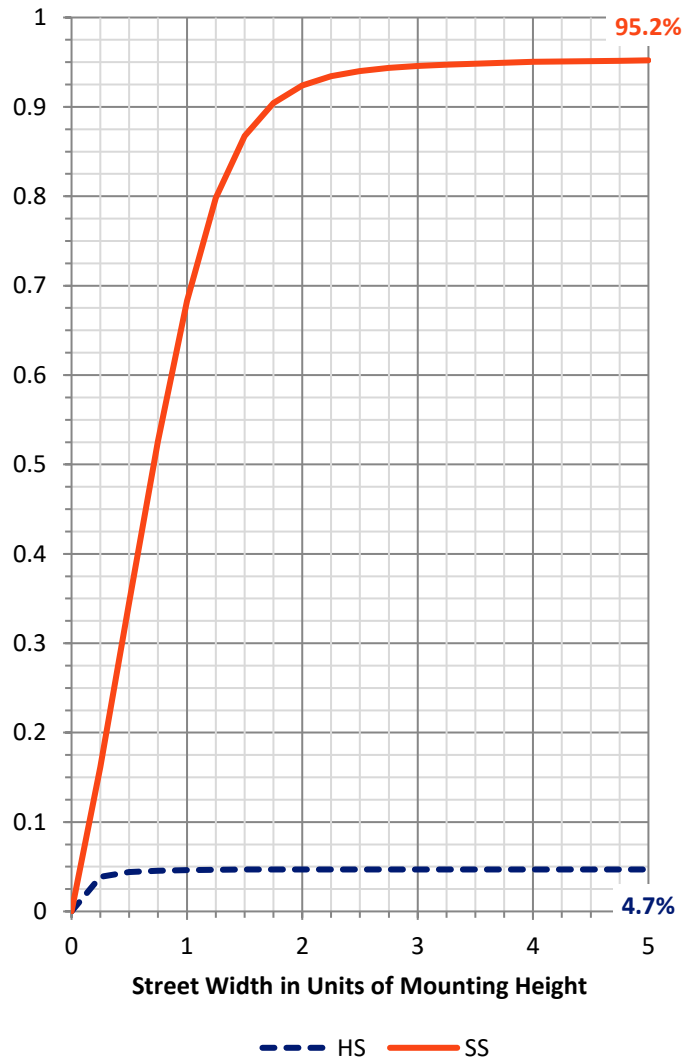
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	799.8	0.0	799.8
	% Fixture	4.7	0.0	4.7
<b>Street Side</b>	Lumens	16159.2	0.0	16159.2
	% Fixture	95.3	0.0	95.3
<b>Total</b>	Lumens	16959.0	0.0	16959.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	213.8	1.3
10°-20°	690.2	4.1
20°-30°	1285.4	7.6
30°-40°	2273.7	13.4
40°-50°	3477.0	20.5
50°-60°	3942.1	23.2
60°-70°	3379.3	19.9
70°-80°	1636.7	9.7
80°-90°	60.7	0.4
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	16959.0	100.0
0°-180°	16959.0	100.0

**Coefficient of Utilization**

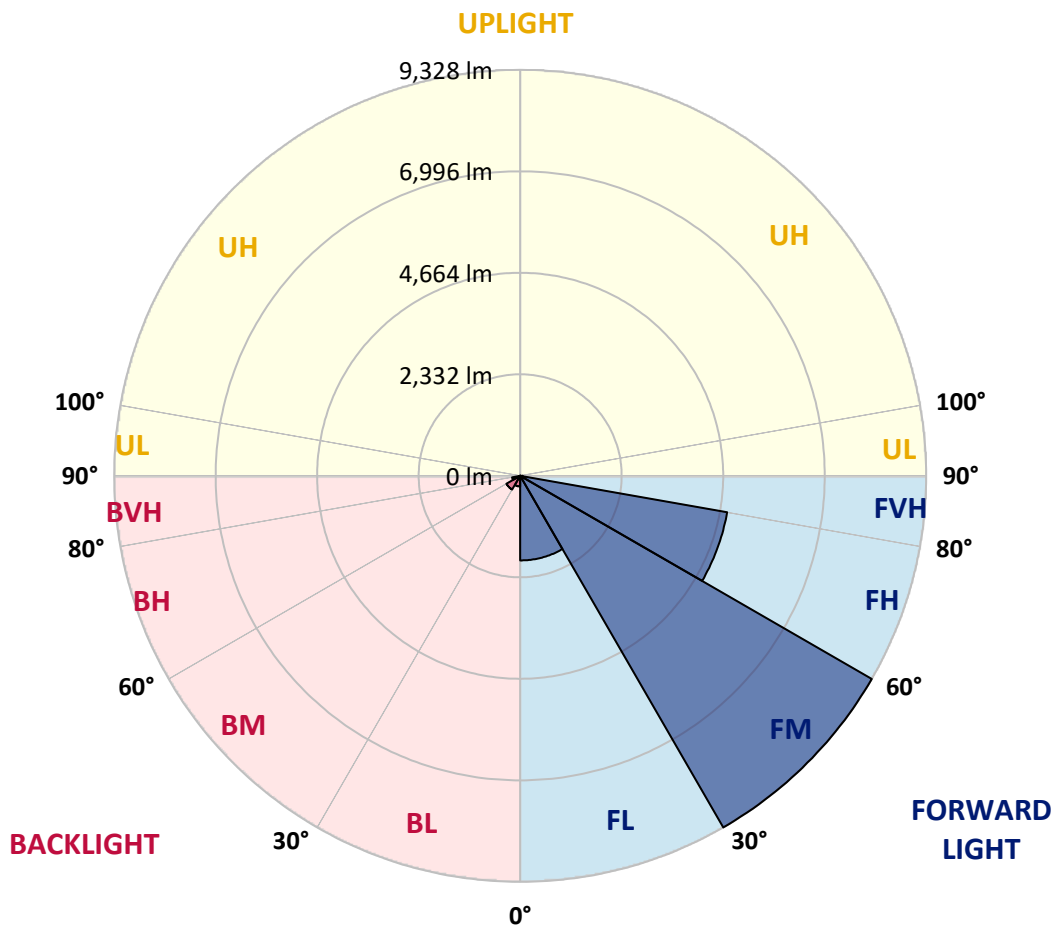


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1944.2	11.5			
FM (30°-60°)	9327.6	55.0			
FH (60°-80°)	4827.7	28.5			G2/5000
FVH (80°-90°)	59.7	0.4			G1/100
BL (0°-30°)	245.4	1.4	B1/500		
BM (30°-60°)	365.1	2.2	B1/1000		
BH (60°-80°)	188.3	1.1	B1/500		G1/500
BVH (80°-90°)	1.0	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G2**  
 Type II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	2270.1	2270.1	2270.1	2270.1	2270.1	2270.1	2270.1	2270.1	2270.1	2270.1	2270.1
2.5°	3103.0	3086.1	3069.1	3004.2	2944.9	2891.2	2789.6	2656.9	2538.3	2512.9	2374.5
5°	3645.1	3625.3	3599.9	3535.0	3458.8	3368.4	3218.8	3015.5	2806.5	2761.4	2504.4
7.5°	4012.2	3995.2	3958.5	3927.4	3851.2	3763.7	3597.1	3359.9	3071.9	3015.5	2654.1
10°	4263.4	4252.1	4246.5	4221.1	4164.6	4094.0	3927.4	3679.0	3340.2	3275.2	2812.2
12.5°	4353.8	4353.8	4382.0	4424.4	4432.9	4410.3	4257.8	4009.3	3622.5	3554.8	2998.5
15°	4232.4	4246.5	4308.6	4444.1	4585.3	4678.5	4582.5	4351.0	3933.1	3859.7	3218.8
17.5°	4198.5	4212.6	4255.0	4373.6	4562.7	4811.2	4859.2	4681.3	4226.7	4164.6	3444.6
20°	4294.5	4308.6	4345.3	4447.0	4591.0	4842.3	5042.7	5000.4	4537.3	4472.4	3673.3
22.5°	4523.2	4531.7	4531.7	4610.7	4737.8	4924.1	5158.5	5302.5	4856.4	4785.8	3899.2
25°	5014.5	4997.5	4929.8	4890.3	4972.1	5124.6	5305.3	5567.9	5212.1	5116.1	4142.0
27.5°	5658.2	5714.7	5550.9	5361.8	5299.7	5387.2	5511.4	5802.2	5556.6	5454.9	4362.3
30°	6530.7	6508.1	6293.5	6022.5	5754.2	5723.2	5765.5	6002.7	5901.1	5805.1	4607.9
32.5°	7247.9	7290.2	7064.3	6734.0	6333.0	6143.9	6098.7	6242.7	6268.1	6206.0	4898.7
35°	7984.8	8030.0	7809.7	7442.7	6965.5	6649.3	6519.4	6539.2	6722.7	6643.6	5203.7
37.5°	8645.5	8685.0	8467.6	8092.1	7614.9	7228.1	7041.7	6889.3	7163.1	7092.6	5525.5
40°	9148.0	9153.7	9006.9	8670.9	8219.1	7818.2	7606.4	7307.1	7629.0	7581.0	5861.5
42.5°	9503.8	9515.1	9407.8	9119.8	8701.9	8329.2	8157.0	7801.3	8165.5	8123.1	6251.2
45°	9670.4	9690.2	9678.9	9413.5	9066.2	8744.3	8687.8	8326.4	8752.8	8713.2	6700.1
47.5°	9512.3	9512.3	9656.3	9619.6	9300.5	9085.9	9150.9	8874.2	9390.9	9354.2	7157.5
50°	8854.4	8862.9	9156.5	9577.2	9390.9	9342.9	9546.2	9410.6	9969.7	9992.3	7705.3
52.5°	7126.4	7112.3	8103.4	8910.9	9328.7	9458.6	9910.4	9958.4	10664.3	10732.0	8250.2
55°	5325.1	5316.6	6265.3	7730.7	8893.9	9399.3	10113.7	10446.8	11257.2	11299.5	8656.8
57.5°	4215.4	4192.9	4715.2	6231.4	7911.4	9133.9	10122.1	10540.0	11587.5	11660.9	9052.0
60°	3241.3	3221.6	3611.2	4636.1	6519.4	8428.1	9879.3	10545.7	11906.6	12036.5	9582.9
62.5°	2318.1	2340.7	2639.9	3326.0	5014.5	7431.4	9563.1	10624.7	12474.1	12620.9	10336.7
65°	1564.2	1552.9	1801.4	2264.4	3566.0	6090.2	9077.5	10791.3	13496.2	13753.1	11240.2
67.5°	1087.0	1095.5	1208.4	1473.9	2264.4	4675.7	8269.9	10884.5	14552.2	14752.6	11872.7
70°	784.9	796.2	858.3	991.0	1383.5	3170.8	6990.9	10458.1	14837.3	15012.4	11432.2
72.5°	516.7	539.3	632.5	703.0	883.7	1984.9	5150.0	9009.7	13609.1	13739.0	9591.3
75°	279.5	285.2	406.6	525.2	629.6	1236.7	3071.9	6076.1	10181.4	10139.1	6324.6
77.5°	217.4	225.9	251.3	375.5	423.5	680.5	1214.1	2744.4	4822.5	4692.6	2157.1
80°	132.7	138.4	175.1	223.1	296.5	395.3	355.8	745.4	979.7	917.6	316.2
82.5°	79.1	84.7	104.5	186.3	234.3	186.3	124.2	180.7	183.5	180.7	79.1
85°	14.1	14.1	73.4	129.9	124.2	53.6	73.4	59.3	53.6	56.5	16.9
87.5°	0.0	0.0	28.2	39.5	56.5	19.8	28.2	14.1	14.1	14.1	8.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2270.1	2270.1	2270.1	2270.1	2270.1	2270.1	2270.1	2270.1	2270.1	2270.1	2270.1
2.5°	2289.8	2193.8	1996.2	1824.0	1651.7	1524.7	1428.7	1329.9	1296.0	1253.6	1231.0
5°	2329.4	2140.2	1747.7	1434.3	1168.9	965.6	835.7	756.7	705.9	669.2	660.7
7.5°	2388.7	2097.8	1547.3	1123.7	832.9	629.6	522.3	468.7	440.5	423.5	417.9
10°	2459.2	2061.1	1349.6	875.3	587.3	443.3	384.0	361.4	350.1	344.5	341.6
12.5°	2558.1	2047.0	1183.0	674.8	443.3	364.2	333.2	319.1	310.6	302.1	299.3
15°	2687.9	2052.7	1030.6	522.3	367.1	324.7	299.3	285.2	273.9	265.4	265.4
17.5°	2823.5	2061.1	880.9	423.5	333.2	296.5	268.2	248.5	240.0	231.5	228.7
20°	2950.5	2058.3	736.9	361.4	302.1	265.4	237.2	217.4	203.3	194.8	194.8
22.5°	3071.9	2041.4	601.4	324.7	276.7	234.3	203.3	183.5	172.2	163.8	163.8
25°	3201.8	2007.5	491.3	296.5	245.6	206.1	175.1	155.3	146.8	138.4	138.4
27.5°	3303.5	1951.0	400.9	271.1	217.4	177.9	149.6	132.7	124.2	118.6	118.6
30°	3413.6	1869.1	333.2	242.8	189.2	152.5	127.1	112.9	104.5	101.6	101.6
32.5°	3535.0	1778.8	285.2	214.6	160.9	129.9	107.3	98.8	90.4	87.5	87.5
35°	3676.2	1699.7	256.9	186.3	141.2	110.1	93.2	84.7	79.1	79.1	79.1
37.5°	3837.1	1617.8	231.5	163.8	121.4	93.2	79.1	76.2	73.4	70.6	70.6
40°	4012.2	1530.3	208.9	144.0	104.5	79.1	67.8	67.8	64.9	64.9	64.9
42.5°	4209.8	1454.1	189.2	127.1	90.4	67.8	59.3	59.3	56.5	56.5	56.5
45°	4424.4	1383.5	172.2	112.9	79.1	59.3	53.6	50.8	48.0	48.0	48.0
47.5°	4678.5	1344.0	158.1	98.8	67.8	50.8	45.2	42.4	39.5	36.7	36.7
50°	5003.2	1360.9	144.0	81.9	59.3	42.4	36.7	33.9	31.1	28.2	28.2
52.5°	5260.1	1352.4	124.2	70.6	48.0	33.9	28.2	25.4	22.6	19.8	19.8
55°	5446.5	1318.6	107.3	59.3	36.7	28.2	22.6	16.9	14.1	14.1	14.1
57.5°	5630.0	1284.7	90.4	48.0	28.2	19.8	14.1	11.3	11.3	11.3	11.3
60°	5915.2	1236.7	79.1	39.5	22.6	14.1	8.5	8.5	5.6	5.6	5.6
62.5°	6262.5	1177.4	64.9	33.9	16.9	11.3	5.6	5.6	0.0	0.0	0.0
65°	6643.6	1072.9	53.6	25.4	14.1	8.5	5.6	0.0	0.0	0.0	0.0
67.5°	6556.1	861.2	45.2	16.9	11.3	5.6	2.8	0.0	0.0	0.0	0.0
70°	5799.4	581.6	36.7	14.1	8.5	5.6	2.8	0.0	0.0	0.0	0.0
72.5°	4543.0	344.5	25.4	11.3	5.6	2.8	0.0	0.0	0.0	0.0	0.0
75°	2908.2	172.2	16.9	8.5	5.6	2.8	0.0	0.0	0.0	0.0	0.0
77.5°	974.1	84.7	11.3	5.6	2.8	0.0	0.0	0.0	0.0	0.0	0.0
80°	138.4	28.2	5.6	2.8	2.8	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	31.1	11.3	2.8	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	11.3	5.6	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	5.6	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)